

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1, 6, 11, 25, 40 and 47-49 have been amended. Claims 1, 2, 4-7, 9-17, 20-31, 34-44, 46-53 and 55-58 are pending and under consideration.

I. Objection to the Specification

In the Office Action, at page 4, the specification was objected to. The specification is amended in light of the Examiner's comments, and accordingly, withdrawal of the objection to the specification is respectfully requested.

II. Rejection under 35 U.S.C. § 103

In the Office Action, at pages 5-17, claims 1, 2, 4-7, 9-17, 20-31, 34-44, 46-53 and 55-58 were rejected under 35 USC 103(a) as being unpatentable over various combinations of Shaw et al. (US 5,276,436) (hereinafter "Shaw"), Sakuda et al. (US 5,886,545) (hereinafter "Sakuda"), Welmer (US 5,491,805) (hereinafter "Welmer") and Yamashita et al. (US 5,808,693) (hereinafter "Yamashita"). These rejections are respectfully traversed because the combination of the teachings of Shaw, Sakuda and Welmer does not suggest that:

the signal checking unit senses whether an input signal cable is connected to the display device and only checks whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device,

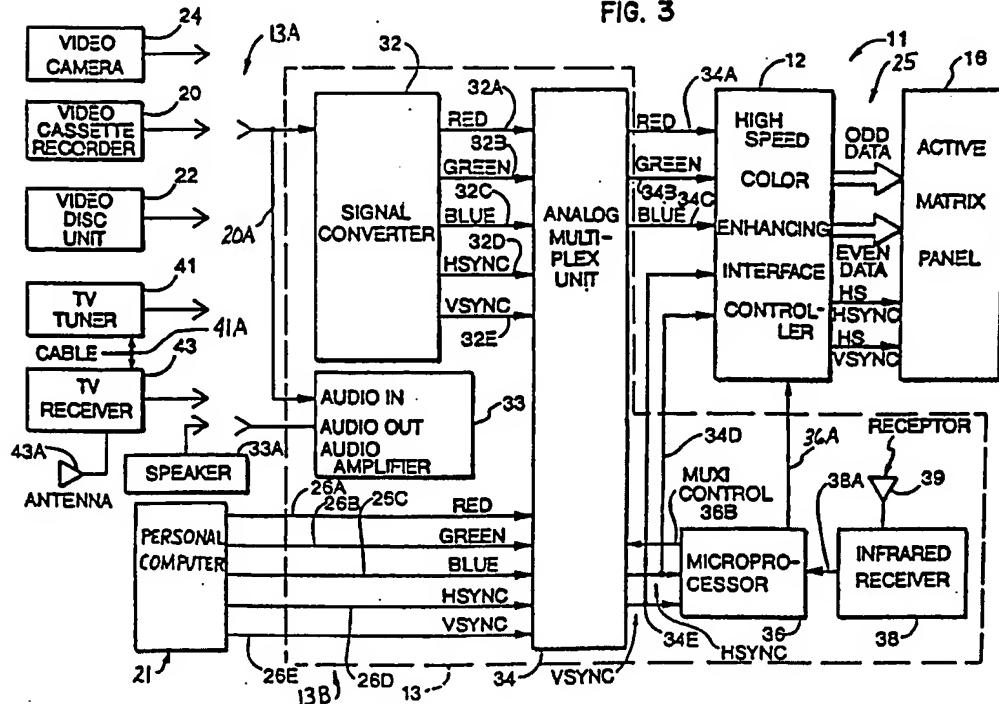
as recited in amended independent claim 1.

Claim 1 is amended to clarify that the decoding of the input signals is done to determine the abnormality of the signal and that the signal checking unit only checks whether the identified signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device. Thus, the decoding in the present invention is performed in order to check the abnormality of the signal.

In contrast, Shaw does not decode the input signals in order to determine the abnormality of the input signal. Thus, Shaw does not suggest that "the signal checking unit...only checks whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device," as recited in amended claim 1.

For the convenience of the Examiner, Figure 3 of Shaw is reproduced below.

FIG. 3



As shown, in Shaw, the signal converter 32 receives the NTSC television signal from the video cassette recorder 20 and converts the NTSC television signal into an analog RGB signal. The analog multiplex unit 34 allows the output signals from the signal converter 32 or the output signals from the video drive module 26 to be coupled to the high speed color enhancing interface controller 12. The microprocessor 36 determines which of the video source standards (VGA Graphics, NTSC, PAL, etc.) are to be coupled to the high speed color enhancing interface controller 12. For this determination, the microprocessor 36 generates a control signal (MUX CONTROL) which switches the multiplex unit 34 to receive and pass to the controller 12, either the input signals from the signal converter 32 or the input signals from the video drive module 26 (refer to column 6, lines 4-52).

Further, the operations of the microprocessor 36 are shown in Figure 6 of Shaw, which is reproduced below for the Examiner's convenience.

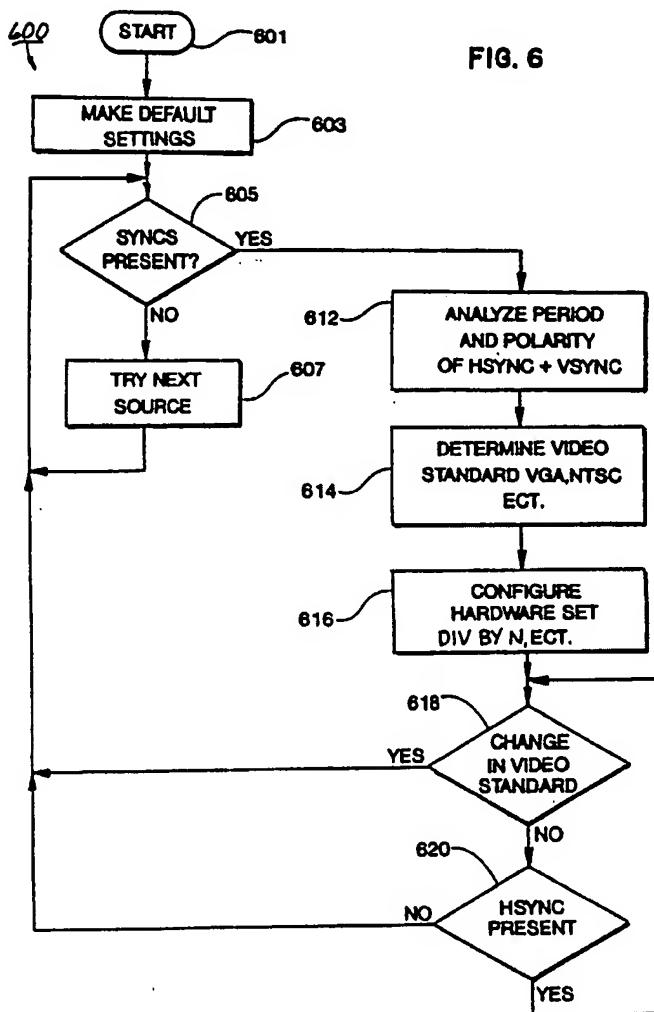


FIG. 6

As shown above, if the microprocessor 36 receives no signal, this proceeds to step 607. Conversely, if the microprocessor 36 receives a signal, this proceeds to step 612. The Examiner alleges no synchronizing signal means that the input signal is abnormal. Meanwhile, the microprocessor 36 receives a signal processed by the signal converter 32. Accordingly, "the microprocessor 36 receives no signal" means that the signal converter 32 receives no signal. According to the Examiner's interpretation, when the signal converter 32 receives no signal, the microprocessor 36 determines that the input signal is abnormal.

By contrast, in claim 1, the claimed invention checks whether the input signal is abnormal by decoding the input signal when the input signal cable is connected to the display device. That is, when the input signal exists, the claimed invention checks whether the input signal is

abnormal by decoding the input signal. Conversely, in Shaw, when the microprocessor 36 receives no signal, the signal converter 32 does not have any signal to be decoded, because the signal converter 32 receives no signal. Accordingly, the microprocessor 36 does not determine that the input signal is abnormal, based on the decoding of the signal converter 32. Therefore, Shaw does not disclose or teach "wherein the signal checking unit senses whether an input signal cable is connected to the display device and only checks whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device" in claim 1.

Sakuda and Welmer fail to make up for the deficiencies in Shaw.

Therefore, as the combination of the teachings of Shaw, Sakuda and Welmer does not suggest all the features of amended independent claim 1, claim 1 patentably distinguishes over the references relied upon.

Similar to the above argument regarding claim 1, it is respectfully submitted that Shaw, Sakuda and Welmer, taken alone or in combination, also does not suggest that "the checking comprises sensing whether an input signal cable is connected to the display device and only determining whether the identified input signal is abnormal by decoding the input signal when the input signal cable is connected to the display device," as recited in amended independent claim 6.

Similar to the above argument regarding claim 1, it is respectfully submitted that Shaw, Sakuda and Welmer, taken alone or in combination, also does not suggest that "the signal checking unit senses whether an input signal cable is connected to the display device and only checks whether the identified input signal is abnormal by decoding the identified input signal when the input signal cable is connected to the display device," as recited in amended independent claim 11.

Similar to the above argument regarding claim 1, it is respectfully submitted that Shaw, Sakuda and Welmer, taken alone or in combination, also does not suggest that "the checking comprises sensing whether a signal input cable is connected and only checking whether the identified input signal is abnormal by decoding the input signal when the signal input cable is connected," as recited in amended independent claim 25.

Similar to the above argument regarding claim 1, it is respectfully submitted that Shaw, Sakuda and Welmer, taken alone or in combination, also does not suggest that "the signal checking unit senses whether a cable via which each signal is input is connected and only

checks whether the input signal is normal by decoding the input signal when the cable via which each signal is input is connected," as recited in amended independent claim 40.

Similar to the above argument regarding claim 1, it is respectfully submitted that Shaw, Sakuda and Welmer, taken alone or in combination, also does not suggest that "whether the analog input port receives the normal analog input signal is determined by sensing whether a cable via which each signal is input is connected and only decoding the input signal to determine whether the analog signal is abnormal when the cable via which each signal is input is connected," as recited in amended independent claim 47.

Similar to the above argument regarding claim 1, it is respectfully submitted that Shaw, Sakuda and Welmer, taken alone or in combination, also does not suggest that "whether the digital input port receives the normal digital input signal is determined by sensing whether a cable via which each signal is input is connected and only decoding the input signal to determine whether the analog signal is abnormal when the cable via which each signal is input is connected," as recited in amended independent claim 48.

Similar to the above argument regarding claim 1, it is respectfully submitted that Shaw, Sakuda and Welmer, taken alone or in combination, also does not suggest that "wherein whether the input signal is normal is checked by sensing whether a cable via which each signal is input is connected and only decoding the input signal to determine whether the input signal is abnormal when the cable via which each signal is input is connected," as recited in amended independent claim 49.

Therefore, independent claims 1, 6, 11, 25, 40 and 47-49 patentably distinguish over the references relied upon.

In addition, Yamashita fails to make up for the deficiencies in Shaw, Sakuda and Welmer.

Claims 2, 4, 5, 7, 9, 10, 12-17, 20-24, 26-31, 34-44, 46, 50-53 and 55-58 depend either directly or indirectly from independent claims 1, 6, 11, 25, 40 and 47-49 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon, and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejections is requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: August 30, 2010

By: Gregory W. Harper
Gregory W. Harper
Registration No. 55,248

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501